




# Dell™ OptiPlex™ 170L

## Quick Reference Guide

**Models MTC2 and DHS**

[www.dell.com](http://www.dell.com) | [support.dell.com](http://support.dell.com)

## Notes, Notices, and Cautions

-  **NOTE:** A NOTE indicates important information that helps you make better use of your computer.
-  **NOTICE:** A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.
-  **CAUTION:** A CAUTION indicates a potential for property damage, personal injury, or death.

If you purchased a Dell™ n Series computer, any references in this document to Microsoft® Windows® operating systems are not applicable.

The *Drivers and Utilities* CD (ResourceCD), operating system media, and *Quick Reference Guides* are optional and may not ship with all computers.

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**Models MTC2 and DHS**

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## Finding Information for Your Computer

What Are You Looking For?	Find It Here
<ul style="list-style-type: none"> <li>• A diagnostic program for my computer</li> <li>• Drivers for my computer</li> <li>• My computer documentation</li> <li>• My device documentation</li> <li>• Desktop System Software (DSS)</li> </ul>	<p data-bbox="820 506 1372 535"><b>Drivers and Utilities CD (also known as the ResourceCD)</b></p> <p data-bbox="820 548 1395 636">Documentation and drivers are already installed on your computer. You can use the CD to reinstall drivers, run the Dell Diagnostics, or access your documentation.</p> <div data-bbox="841 653 1084 898" style="text-align: center;"> </div> <p data-bbox="1133 646 1395 909">Readme files may be included on your CD to provide last-minute updates about technical changes to your computer or advanced technical-reference material for technicians or experienced users.</p> <p data-bbox="820 911 1395 972"><b>NOTE:</b> The latest drivers and documentation updates can be found at <a href="http://support.dell.com">support.dell.com</a>.</p> <p data-bbox="820 974 1395 1035"><b>NOTE:</b> The <i>Drivers and Utilities</i> CD is optional and may not ship with all computers.</p>
<ul style="list-style-type: none"> <li>• OS updates and patches</li> </ul>	<p data-bbox="820 1045 1068 1075"><b>Desktop System Software</b></p> <p data-bbox="820 1087 1395 1148">Located on the <i>Drivers and Utilities</i> CD and the Dell Support website at <a href="http://support.dell.com">support.dell.com</a>.</p>
<ul style="list-style-type: none"> <li>• Warranty information</li> <li>• Safety instructions</li> <li>• Regulatory information</li> <li>• Ergonomics information</li> <li>• End User License Agreement</li> </ul>	<p data-bbox="820 1165 1075 1194"><b>Product Information Guide</b></p> <div data-bbox="824 1199 1040 1459" style="text-align: center;"> </div>
<ul style="list-style-type: none"> <li>• How to remove and replace parts</li> <li>• Technical specifications</li> <li>• How to configure system settings</li> <li>• How to troubleshoot and solve problems</li> </ul>	<p data-bbox="820 1472 1122 1501"><b>Dell™ OptiPlex™ User's Guide</b></p> <p data-bbox="820 1514 1328 1543"><i>Microsoft® Windows® XP Help and Support Center</i></p> <ol style="list-style-type: none"> <li data-bbox="831 1549 1344 1579">1 Click the <b>Start</b> button and click <b>Help and Support</b>.</li> <li data-bbox="831 1585 1380 1614">2 Click <b>User's and system guides</b> and click <b>User's guides</b>.</li> </ol> <p data-bbox="820 1621 1395 1682">The <i>User's Guide</i> is also available on the <i>Drivers and Utilities</i> CD.</p>

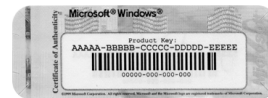
**What Are You Looking For?**

- Service Tag and Express Service Code
- Microsoft Windows License Label

**Find It Here****Service Tag and Microsoft Windows License**

These labels are located on your computer.

- Use the Service Tag to identify your computer when you use [support.dell.com](http://support.dell.com) or contact technical support.



- Enter the Express Service Code to direct your call when contacting technical support. The Express Service Code is not available in all countries.

- Latest drivers for my computer
- Answers to technical service and support questions
- Online discussions with other users and technical support
- Documentation for my computer

**Dell Support Website — [support.dell.com](http://support.dell.com)**

**NOTE:** Select your region to view the appropriate support site.

The Dell Support website provides several online tools, including:

- Solutions — Troubleshooting hints and tips, articles from technicians, and online courses
- Community — Online discussion with other Dell customers
- Upgrades — Upgrade information for components, such as memory, the hard drive, and the operating system
- Customer Care — Contact information, order status, warranty, and repair information
- Downloads — Drivers, patches, and software updates
- Reference — Computer documentation, product specifications, and white papers

- Service call status and support history
- Top technical issues for my computer
- Frequently asked questions
- File downloads
- Details on my computer configuration
- Service contract for my computer

**Dell Premier Support Website — [premiersupport.dell.com](http://premiersupport.dell.com)**

The Dell Premier Support website is customized for corporate, government, and education customers. This website may not be available in all regions.

**What Are You Looking For?**

- How to use Windows XP
- Documentation for my computer
- Documentation for devices (such as a modem)

**Find It Here**

**Windows Help and Support Center**

- 1 Click the **Start** button and click **Help and Support**.
- 2 Type a word or phrase that describes your problem and click the arrow icon.
- 3 Click the topic that describes your problem.
- 4 Follow the instructions on the screen.

- How to reinstall my operating system

**Operating System CD**

The operating system is already installed on your computer. To reinstall your operating system, use the *Operating System CD*. See your *OptiPlex User's Guide* for instructions.



After you reinstall your operating system, use the *Drivers and Utilities CD* to reinstall drivers for the devices that came with your computer.

Your operating system product key label is located on your computer.

**NOTE:** The color of your CD varies based on the operating system you ordered.

**NOTE:** The operating system media are optional and may not ship with all computers.

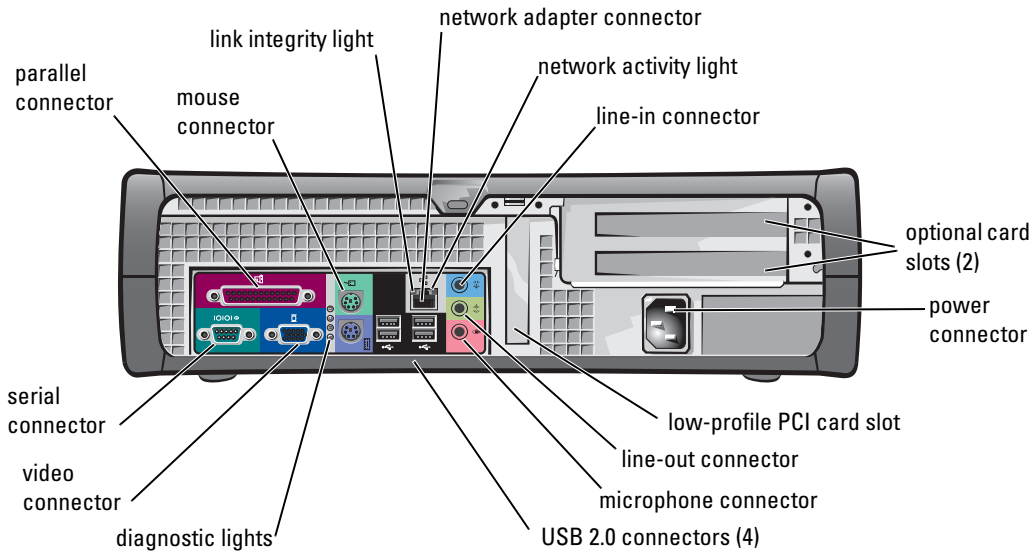
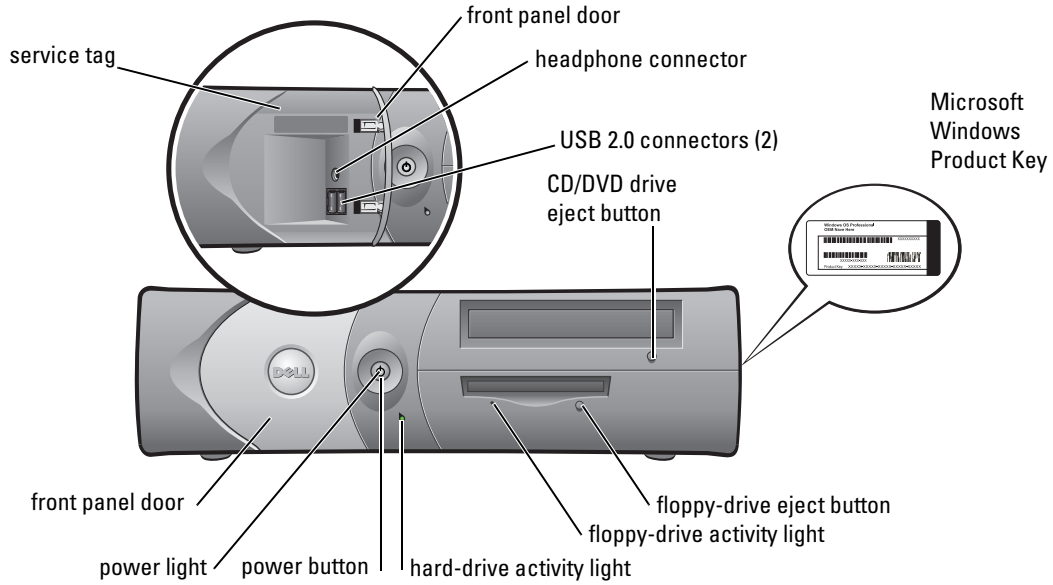
- Regulatory Model Information and Chassis Type

DHS—Small desktop chassis

MTC2—Mini-tower chassis

# About Your Small Desktop Computer

## Front and Back Views



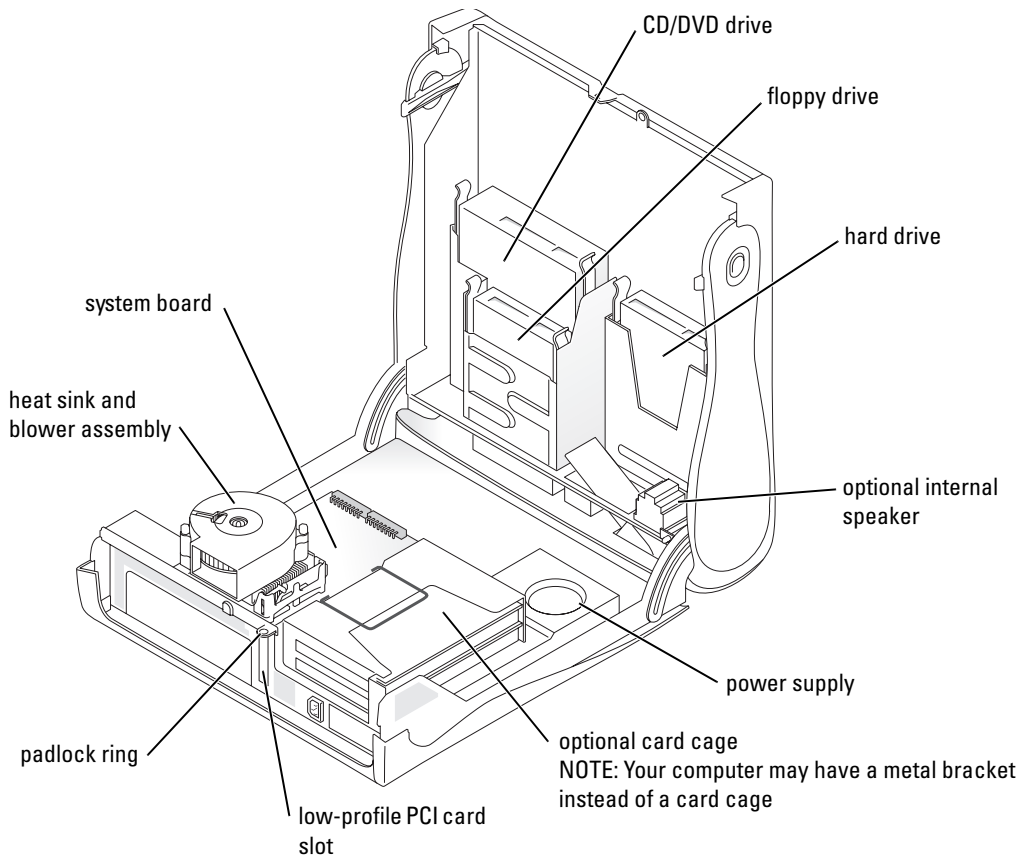


## Inside Your Computer

**⚠ CAUTION:** Before you begin any of the procedures in this section, follow the safety instructions in the *Product Information Guide*.

**⚠ CAUTION:** To avoid electrical shock, always unplug your computer from the electrical outlet before opening the cover.

**➡ NOTICE:** Be careful when opening the computer cover to ensure that you do not accidentally disconnect cables from the system board.



## Attaching and Removing the Computer Stand

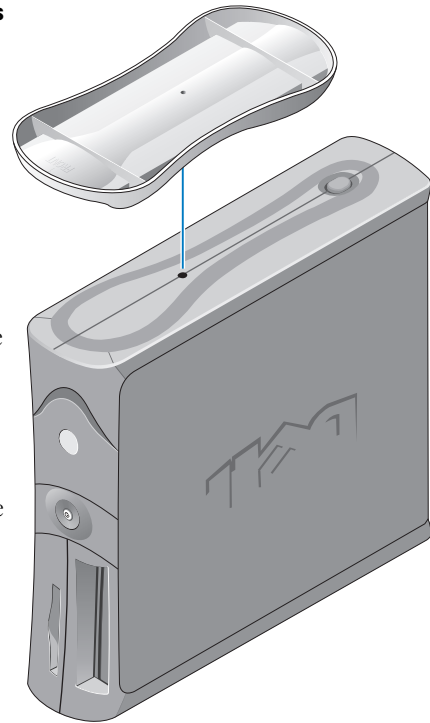
**⚠ CAUTION:** Before you begin any of the procedures in this section, follow the safety instructions in the *Product Information Guide*.

**✍ NOTE:** Place your computer on a soft surface to prevent scratching the top cover.

Your computer can be used in either a vertical or horizontal position.

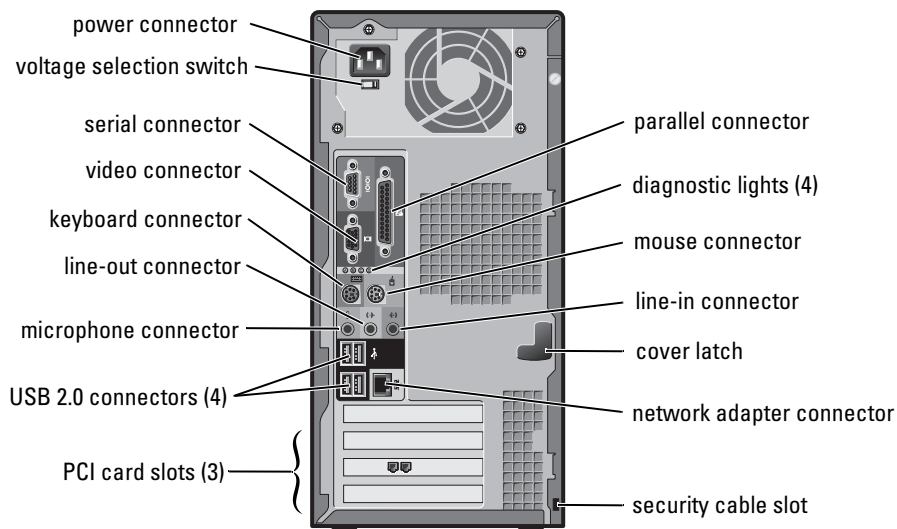
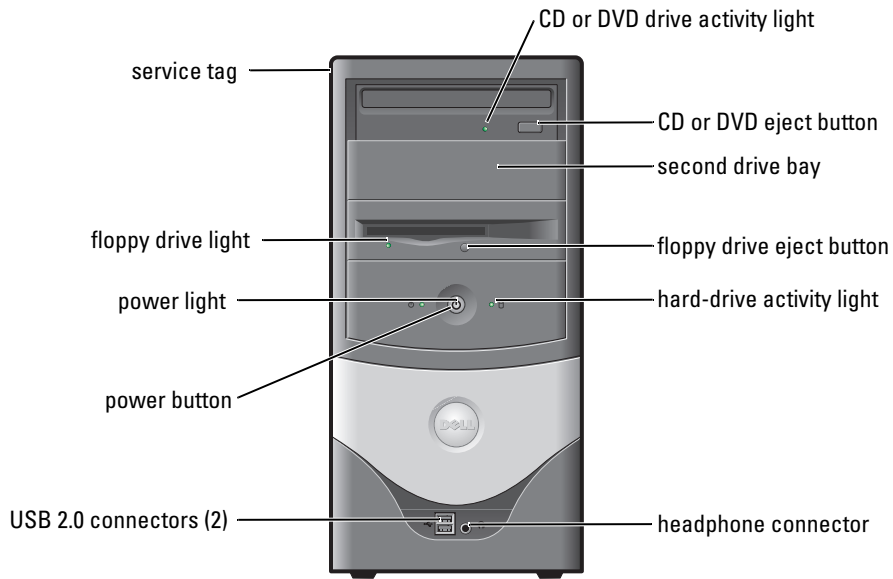
To use the computer in a vertical position, you must attach the computer stand:

- 1 Place the computer on its right side so that the drive bays are at the bottom and fit the stand onto what was the left side of the computer:
  - a Position the stand as shown in the following figure by aligning the large round hole in the stand with the securing button on the side of the cover.
  - b Align the captive screw in the stand with the screw hole in the cover, and tighten the thumbscrew.
- 2 Rotate the computer so that the stand is at the bottom and the drives are at the top.



# About Your Mini-Tower Computer

## Front and Back Views

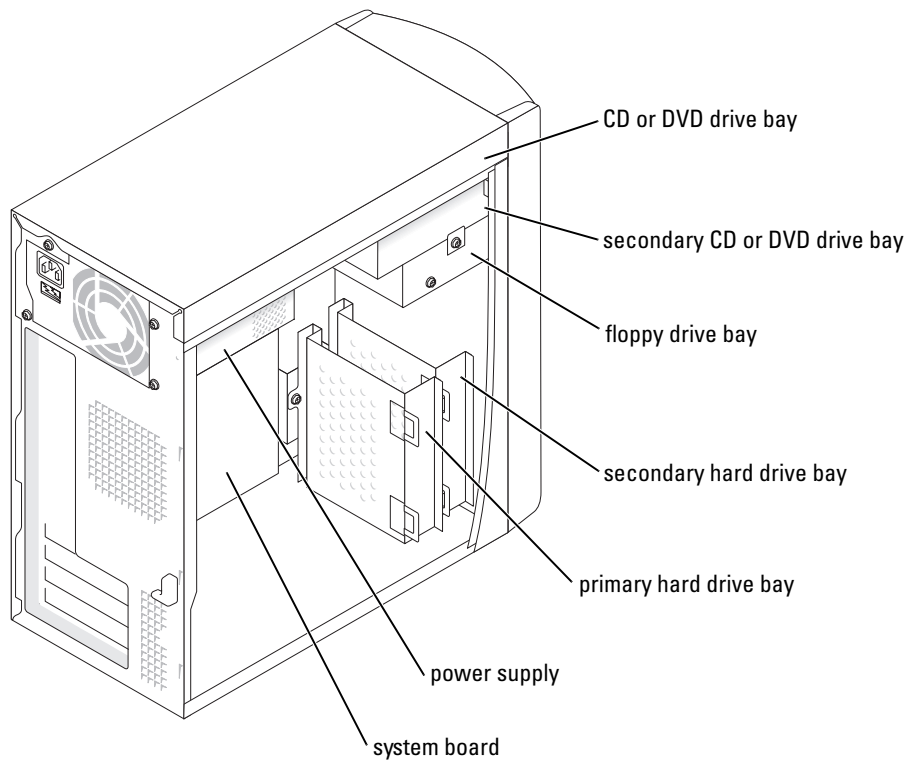


### Inside Your Computer

**⚠ CAUTION:** Before you begin any of the procedures in this section, follow the safety instructions in the *Product Information Guide*.


**⚠ CAUTION:** To avoid electrical shock, always unplug your computer from the electrical outlet before opening the cover.

**➡ NOTICE:** Be careful when opening the computer cover to ensure that you do not accidentally disconnect cables from the system board.




## Setting Up Your Computer


 **CAUTION:** Before performing any of the procedures in this section, follow the safety instructions in the *Product Information Guide*.

 **NOTICE:** If your computer has an expansion card installed (such as a modem card), connect the appropriate cable to the card, *not* to the connector on the back panel.

You must complete all steps to properly set up your computer. See the appropriate illustrations that follow the instructions.


1 Connect the keyboard and mouse.

 **NOTICE:** Do not attempt to operate a PS/2 mouse and a USB mouse simultaneously.

 **NOTE:** If you have a USB-compliant mouse or keyboard, use the USB connectors on the back of your computer.


2 Connect the modem or network cable.

Insert the network cable, not the phone line, into the network connector. If you have an optional modem, connect the phone line to the modem.

 **NOTICE:** Do not connect a modem cable to the network adapter. Voltage from telephone communications can cause damage to the network adapter.

3 Connect the monitor.


Align and gently insert the monitor cable to avoid bending connector pins. Tighten the thumbscrews on the cable connectors.


 **NOTE:** Some monitors have the video connector underneath the back of the screen. See the documentation that came with your monitor for its connector locations.

4 Connect the speakers.

5 Connect power cables to the computer, monitor, and devices and insert the other ends of the power cables to electrical outlets.

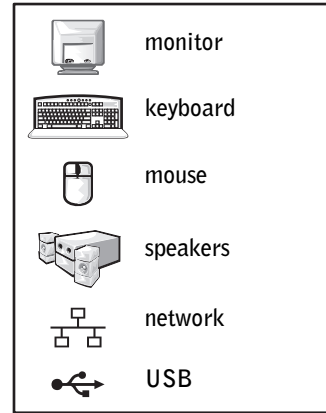
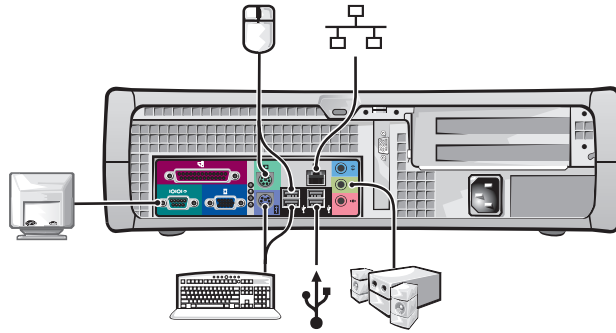
6 Verify that the voltage selection switch is set correctly for your location. Your computer has a manual voltage selection switch. Computers with a voltage selection switch on the back panel must be manually set to operate at the correct operating voltage.

 **NOTICE:** To help avoid damaging a computer with a manual voltage selection switch, set the switch for the voltage that most closely matches the AC power available in your location.

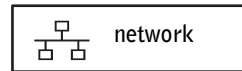
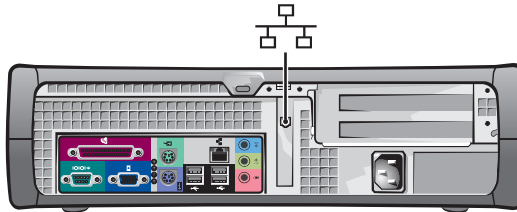
 **NOTE:** Before you install any devices or software that did not ship with your computer, read the documentation that came with the software or device, or contact the vendor to verify that the software or device is compatible with your computer and operating system.

## Small Desktop Computer

### Setup Without Cards

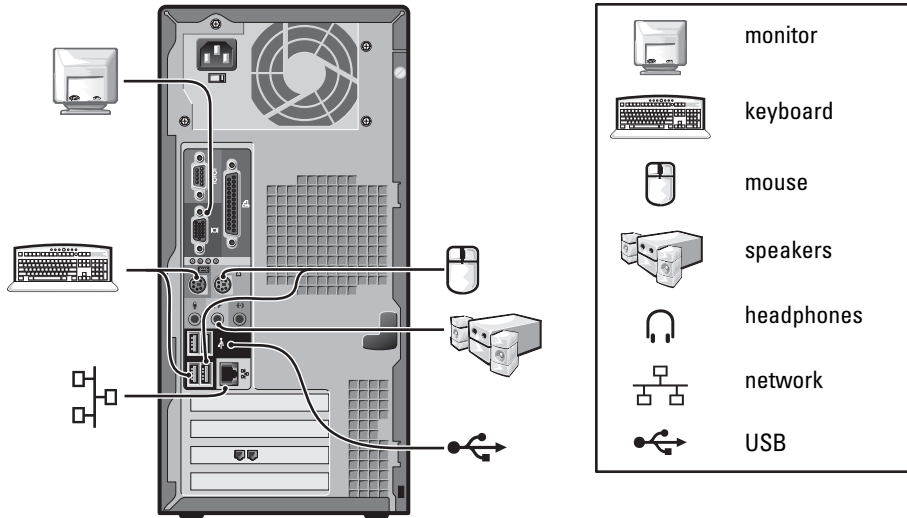


### Setup With Cards

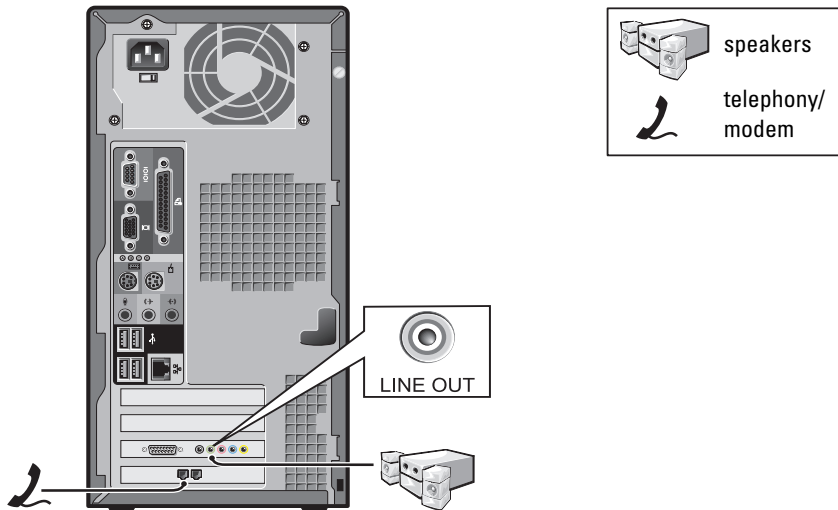


## Mini-tower Computer

### Setup Without Cards



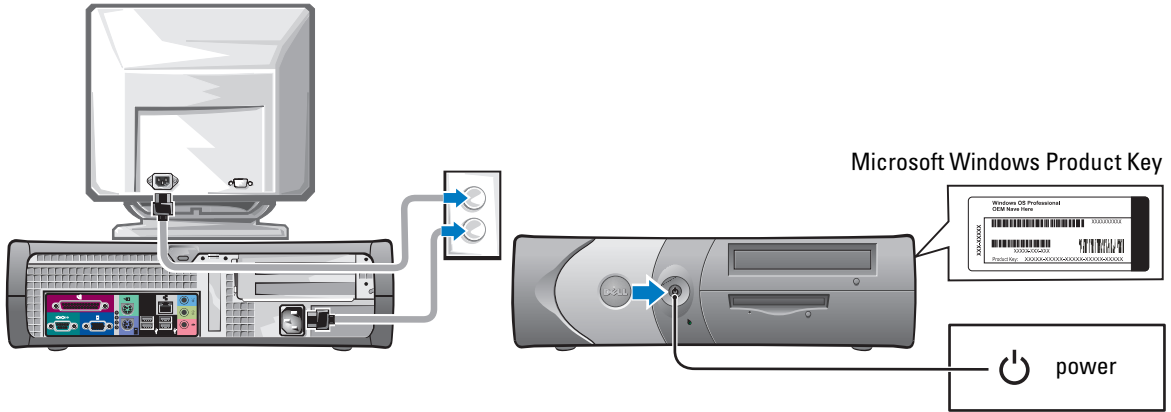
### Setup With Cards



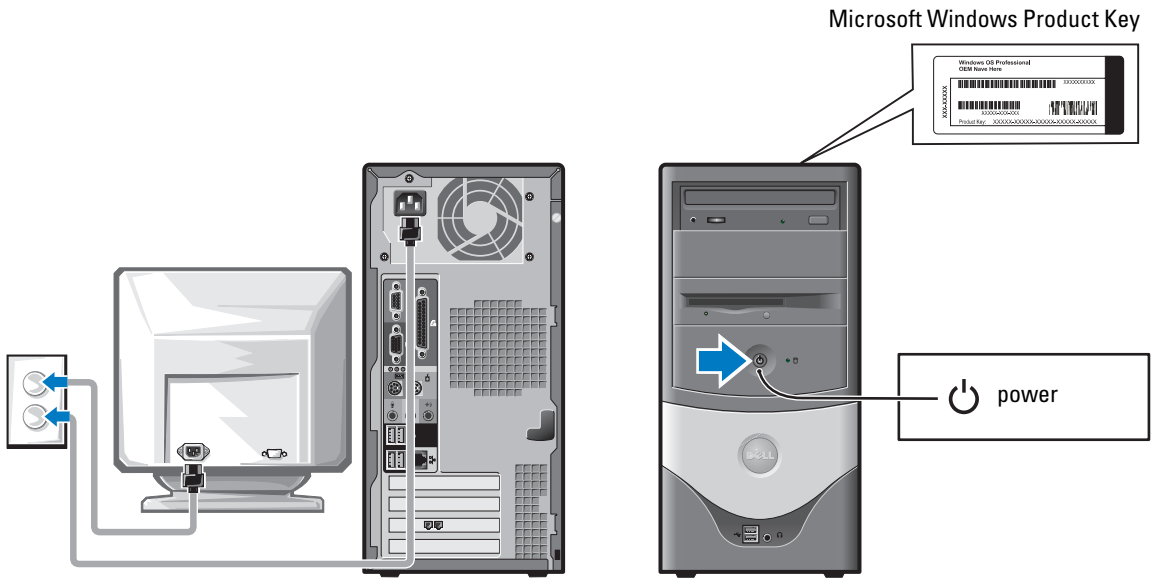
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## Completed Setup

### Small Desktop Computer



### Mini-Tower Computer





## Solving Problems

Dell provides a number of tools to help you if your computer does not perform as expected. For the latest troubleshooting information available for your computer, see the Dell Support website at [support.dell.com](http://support.dell.com).

If computer problems occur that require help from Dell, write a detailed description of the error, beep codes, or diagnostics light patterns; record your Express Service Code and Service Tag below; and then contact Dell from the same location as your computer.

See "Finding Information for Your Computer" on page 5 for an example of the Express Service Code and Service Tag.

Express Service Code: \_\_\_\_\_

Service Tag: \_\_\_\_\_

### Dell Diagnostics



**CAUTION:** Before you begin any of the procedures in this section, follow the safety instructions located in the *Product Information Guide*.

#### When to Use the Dell Diagnostics

If you experience a problem with your computer, perform the checks in "Solving Problems" of your online *User's Guide* and run the Dell Diagnostics before you contact Dell for technical assistance.

It is recommended that you print these procedures before you begin.



**NOTICE:** The Dell Diagnostics works only on Dell™ computers.

Enter system setup, review your computer's configuration information, and ensure that the device you want to test displays in system setup and is active.

Start the Dell Diagnostics from either your hard drive or from the optional *Drivers and Utilities* CD (also known as the ResourceCD).

#### Starting the Dell Diagnostics From Your Hard Drive

- 1 Turn on (or restart) your computer.
- 2 When the DELL™ logo appears, press <F12> immediately.




**NOTE:** If you see a message stating that no diagnostics utility partition has been found, run the Dell Diagnostics from your *Drivers and Utilities* CD.

If you wait too long and the operating system logo appears, continue to wait until you see the Microsoft® Windows® desktop. Then shut down your computer and try again.

- 3 When the boot device list appears, highlight **Boot to Utility Partition** and press <Enter>.
- 4 When the Dell Diagnostics **Main Menu** appears, select the test you want to run.

### Starting the Dell Diagnostics From the Optional Drivers and Utilities CD

- 1 Insert the *Drivers and Utilities* CD.
- 2 Shut down and restart the computer.  
When the DELL logo appears, press <F12> immediately.  
If you wait too long and the Windows logo appears, continue to wait until you see the Windows desktop. Then shut down your computer and try again.
-  **NOTE:** The next steps change the boot sequence for one time only. On the next start-up, the computer boots according to the devices specified in system setup.
- 3 When the boot device list appears, highlight **IDE CD-ROM Device** and press <Enter>.
- 4 Select the **IDE CD-ROM Device** option from the CD boot menu.
- 5 Select the **Boot from CD-ROM** option from the menu that appears.
- 6 Type 1 to start the ResourceCD menu.
- 7 Type 2 to start the Dell Diagnostics.
- 8 Select **Run the 32 Bit Dell Diagnostics** from the numbered list. If multiple versions are listed, select the version appropriate for your computer.
- 9 When the Dell Diagnostics **Main Menu** appears, select the test you want to run.


### Dell Diagnostics Main Menu

- 1 After the Dell Diagnostics loads and the **Main Menu** screen appears, click the button for the option you want.

Option	Function
Express Test	Performs a quick test of devices. This test typically takes 10 to 20 minutes and requires no interaction on your part. Run <b>Express Test</b> first to increase the possibility of tracing the problem quickly.
Extended Test	Performs a thorough check of devices. This test typically takes an hour or more and requires you to answer questions periodically.
Custom Test	Tests a specific device. You can customize the tests you want to run.
Symptom Tree	Lists the most common symptoms encountered and allows you to select a test based on the symptom of the problem you are having.

- 2 If a problem is encountered during a test, a message appears with an error code and a description of the problem. Write down the error code and problem description and follow the instructions on the screen.

If you cannot resolve the error condition, contact Dell.

-  **NOTE:** The Service Tag for your computer is located at the top of each test screen. If you contact Dell, technical support will ask for your Service Tag.

- 3 If you run a test from the **Custom Test** or **Symptom Tree** option, click the applicable tab described in the following table for more information.

<b>Tab</b>	<b>Function</b>
Results	Displays the results of the test and any error conditions encountered.
Errors	Displays error conditions encountered, error codes, and the problem description.
Help	Describes the test and may indicate requirements for running the test.
Configuration	Displays your hardware configuration for the selected device. The Dell Diagnostics obtains configuration information for all devices from system setup, memory, and various internal tests, and it displays the information in the device list in the left pane of the screen. The device list may not display the names of all the components installed on your computer or all devices attached to your computer.
Parameters	Allows you to customize the test by changing the test settings.

- 4 When the tests are completed, if you are running the Dell Diagnostics from the *Drivers and Utilities* CD, remove the CD.
- 5 Close the test screen to return to the **Main Menu** screen. To exit the Dell Diagnostics and restart the computer, close the **Main Menu** screen.

### System Lights

Your power light may indicate a computer problem.


<b>Power Light</b>	<b>Problem Description</b>	<b>Suggested Resolution</b>
Solid green	Power is on, and the computer is operating normally.	No corrective action is required.
Blinking green	The computer is in the suspended state (Microsoft® Windows® 2000 and Windows XP).	Press the power button, move the mouse, or press a key on the keyboard to wake the computer.
Blinks green several times and then turns off	A configuration error exists.	Check "Diagnostic Lights" on page 20 to see if the specific problem is identified.
Solid yellow	The Dell Diagnostics is running a test, or a device on the system board may be faulty or incorrectly installed.	If the Dell Diagnostics is running, allow the testing to complete. Check "Diagnostic Lights" on page 20 to see if the specific problem is identified. If the computer does not boot, contact Dell for technical assistance.


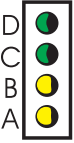



Power Light	Problem Description	Suggested Resolution
Blinking yellow	A power supply or system board failure has occurred.	Check "Diagnostic Lights" on page 20 to see if the specific problem is identified. See "Power Problems" in your online <i>User's Guide</i> .
Solid green and a beep code during POST	A problem was detected while the BIOS was executing.	See "Beep Codes" on page 22 for instructions on diagnosing the beep code. Also, check "Diagnostic Lights" on page 20 to see if the specific problem is identified.
Solid green power light, no beep code and no video during POST	The monitor or the graphics card may be faulty or incorrectly installed.	Check "Diagnostic Lights" on page 20 to see if the specific problem is identified.
Solid green power light and no beep code but the computer locks up during POST	An integrated system board device may be faulty.	Check "Diagnostic Lights" on page 20 to see if the specific problem is identified. If the problem is not identified, contact Dell for technical assistance.

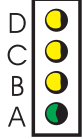
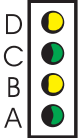
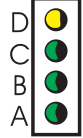
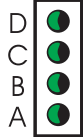
### Diagnostic Lights

**CAUTION:** Before you begin any of the procedures in this section, follow the safety instructions located in the *Product Information Guide*.

To help you troubleshoot a problem, your computer has four lights labeled "A," "B," "C," and "D" on the back panel. The lights can be yellow or green. When the computer starts normally, the patterns or codes on the lights change as the boot process completes. If the POST portion of system boot completes successfully, all four lights display solid green. If the computer malfunctions during the POST process, the pattern displayed on the lights may help identify where in the process the computer halted.

Light Pattern	Problem Description	Suggested Resolution
	The computer is in a normal off condition or a possible pre-BIOS failure has occurred.	<ul style="list-style-type: none"> <li>Verify that the computer is plugged into a working electrical outlet and that you have pressed the power button.</li> </ul>

Light Pattern	Problem Description	Suggested Resolution
 <p>D yellow C green B yellow A yellow</p>	A possible processor failure has occurred.	<ul style="list-style-type: none"> <li>Reinstall the processor and restart the computer.</li> </ul>
 <p>D green C green B yellow A yellow</p>	Memory modules are detected, but a memory failure has occurred.	<ul style="list-style-type: none"> <li>If you have one memory module installed, reinstall it and restart the computer.</li> <li>If you have two memory modules installed, remove the modules, reinstall one module, and then restart the computer. If the computer starts normally, reinstall the second module.</li> <li>If available, install properly working memory of the same type into your computer.</li> <li>If the problem persists, contact Dell.</li> </ul>
 <p>D yellow C yellow B green A yellow</p>	A possible PCI expansion card failure has occurred.	<ul style="list-style-type: none"> <li>Determine if a conflict exists by removing a card (not the video card) and then restarting the computer.</li> <li>If the problem persists, reinstall the card that you removed, remove a different card, and then restart the computer.</li> <li>Repeat this process for each card. If the computer starts normally, troubleshoot the last card removed from the computer for resource conflicts (see "Resolving Software and Hardware Incompatibilities" on page 24").</li> <li>Move each card one at a time to a different PCI slot and restart the computer after each move.</li> <li>If the problem persists, contact Dell.</li> </ul>
 <p>D yellow C green B green A yellow</p>	A possible IDE drive failure has occurred.	<ul style="list-style-type: none"> <li>Reseat all IDE drive power and data cables and restart the computer.</li> </ul>
 <p>D green C green B green A yellow</p>	A possible USB failure has occurred.	<ul style="list-style-type: none"> <li>Reinstall all USB devices, check cable connections, and then restart the computer.</li> </ul>

Light Pattern	Problem Description	Suggested Resolution
	No memory modules are detected.	<ul style="list-style-type: none"> <li>Reinstall all memory modules and restart the computer.</li> <li>To eliminate the possibility of a faulty memory connector, remove all memory modules, reinstall one memory module (if the computer supports a single module), and then restart the computer. If the computer starts normally, move the memory module to a different connector and restart the computer. Continue until you have identified a faulty connector or reinstalled all modules without error.</li> </ul>
	Memory modules are detected, but a memory configuration or compatibility error exists.	<ul style="list-style-type: none"> <li>Ensure that no special memory module/memory connector placement requirements exist (see "Memory" in the online <i>User's Guide</i> for more information).</li> <li>Verify that the memory modules that you are installing are compatible with your computer.</li> <li>If the problem persists, contact Dell.</li> </ul>
	Another failure has occurred.	<ul style="list-style-type: none"> <li>Ensure that the cables are properly connected to the system board from all installed hard drives.</li> <li>Check the computer message that appears on your monitor screen.</li> <li>If the problem persists, contact Dell.</li> </ul>
	The computer is in a normal operating condition after POST.	<ul style="list-style-type: none"> <li>None.</li> </ul>

### Beep Codes

Your computer might emit a series of beeps during start-up if the monitor cannot display errors or problems. This series of beeps, called a beep code, identifies a problem. One possible beep code (code 1-3-1) consists of one beep, a burst of three beeps, and then one beep. This beep code tells you that the computer encountered a memory problem.

If your computer beeps during start-up:

- 1 Write down the beep code.
- 2 See "Dell Diagnostics" on page 17 to identify a more serious cause.
- 3 Contact Dell for technical assistance.

<b>Code</b>	<b>Cause</b>	<b>Code</b>	<b>Cause</b>
1-1-2	Microprocessor register failure	3-1-4	Slave interrupt mask register failure
1-1-3	NVRAM read/write failure	3-2-2	Interrupt vector loading failure
1-1-4	ROM BIOS checksum failure	3-2-4	Keyboard Controller Test failure
1-2-1	Programmable interval timer failure	3-3-1	NVRAM power loss
1-2-2	DMA initialization failure	3-3-2	Invalid NVRAM configuration
1-2-3	DMA page register read/write failure	3-3-4	Video Memory Test failure
1-3	Video Memory Test failure	3-4-1	Screen initialization failure
1-3-1 through 2-4-4	Memory not being properly identified or used	3-4-2	Screen retrace failure
3-1-1	Slave DMA register failure	3-4-3	Search for video ROM failure
3-1-2	Master DMA register failure	4-2-1	No timer tick
3-1-3	Master interrupt mask register failure	4-2-2	Shutdown failure
4-2-3	Gate A20 failure	4-4-1	Serial or parallel port test failure
4-2-4	Unexpected interrupt in protected mode	4-4-2	Failure to decompress code to shadowed memory
4-3-1	Memory failure above address 0FFFFh	4-4-3	Math-coprocessor test failure
4-3-3	Timer-chip counter 2 failure	4-4-4	Cache test failure
4-3-4	Time-of-day clock stopped		

### Running the Dell™ IDE Hard Drive Diagnostics

The Dell IDE Hard Drive Diagnostics is a utility that tests the hard drive to troubleshoot or confirm a hard drive failure.

- 1** Turn on your computer (if your computer is already on, restart it).
- 2** When F2= Setup appears in the upper-right corner of the screen, press <Ctr> <Alt> <D>.
- 3** Follow the instructions on the screen.

If a failure is reported, see "Hard Drive Problems" in the "Solving Problems" section of the online *User's Guide*.

## Resolving Software and Hardware Incompatibilities

If a device is either not detected during the operating system setup or is detected but incorrectly configured, you can use the Hardware Troubleshooter to resolve the incompatibility. In the Microsoft® Windows® 2000 operating system, you can also use Device Manager to resolve incompatibilities.

### Windows XP

To resolve incompatibilities using the Hardware Troubleshooter:

- 1 Click the **Start** button and click **Help and Support**.
- 2 Type `hardware troubleshooter` in the **Search** field and click the arrow to start the search.
- 3 Click **Hardware Troubleshooter** in the **Search Results** list.
- 4 In the **Hardware Troubleshooter** list, click **I need to resolve a hardware conflict on my computer**, and click **Next**.

### Windows 2000

To resolve incompatibilities using Device Manager:

- 1 Click the **Start** button, point to **Settings**, and then click **Control Panel**.
- 2 In the **Control Panel** window, double-click **System**.
- 3 Click the **Hardware** tab.
- 4 Click **Device Manager**.
- 5 Click **View** and click **Resources by connection**.
- 6 Double-click **Interrupt request (IRQ)**.  
Incorrectly configured devices are indicated by a yellow exclamation point (!) or a red x if the device has been disabled.
- 7 Double-click any device marked with an exclamation point to display the **Properties** window. The **Device** status area in the **Properties** window reports the cards or devices that need to be reconfigured.
- 8 Reconfigure the devices or remove the devices from the Device Manager. See the documentation that came with the device for information on configuring the device.

To resolve incompatibilities using the Hardware Troubleshooter:


- 1 Click the **Start** button and click **Help**.
- 2 Click **Troubleshooting and Maintenance** on the **Contents** tab, click **Windows 2000 troubleshooters**, and then click **Hardware**.

In the **Hardware Troubleshooter** list, click **I need to resolve a hardware conflict on my computer** and click **Next**.



## Using Microsoft® Windows® XP System Restore


The Microsoft® Windows® XP operating system provides System Restore to allow you to return your computer to an earlier operating state (without affecting data files) if changes to the hardware, software, or other system settings have left the computer in an undesirable operating state. See the Windows Help and Support Center for information on using System Restore.

 **NOTICE:** Make regular backups of your data files. System Restore does not monitor your data files or recover them.

### Creating a Restore Point

- 1 Click the **Start** button and click **Help and Support**.
- 2 Click **System Restore**.
- 3 Follow the instructions on the screen.

### Restoring the Computer to an Earlier Operating State

 **NOTICE:** Before you restore the computer to an earlier operating state, save and close any open files and exit any open programs. Do not alter, open, or delete any files or programs until the system restoration is complete.

- 1 Click the **Start** button, point to **All Programs**→**Accessories**→**System Tools**, and then click **System Restore**.
- 2 Ensure that **Restore my computer to an earlier time** is selected and click **Next**.
- 3 Click a calendar date to which you want to restore your computer.

The **Select a Restore Point** screen provides a calendar that allows you to see and select restore points. All calendar dates with available restore points appear in boldface type.

- 4 Select a restore point and click **Next**.

If a calendar date has only one restore point, then that restore point is automatically selected. If two or more restore points are available, click the restore point that you prefer.


- 5 Click **Next**.

The **Restoration Complete** screen appears after System Restore finishes collecting data and then the computer restarts.

- 6 After the computer restarts, click **OK**.

To change the restore point, you can either repeat the steps using a different restore point, or you can undo the restoration.

### Undoing the Last System Restore

 **NOTICE:** Before you undo the last system restore, save and close all open files and exit any open programs. Do not alter, open, or delete any files or programs until the system restoration is complete.

- 1 Click the **Start** button, point to **All Programs**→**Accessories**→**System Tools**, and then click **System Restore**.
- 2 Click **Undo my last restoration** and click **Next**.
- 3 Click **Next**.

The **System Restore** screen appears and the computer restarts.

- 4 After the computer restarts, click **OK**.

### Enabling System Restore


If you reinstall Windows XP with less than 200 MB of free hard-disk space available, System Restore is automatically disabled. To see if System Restore is enabled:

- 1 Click the **Start** button and click **Control Panel**.
- 2 Click **Performance and Maintenance**.
- 3 Click **System**.
- 4 Click the **System Restore** tab.
- 5 Ensure that **Turn off System Restore** is unchecked.

### Reinstalling Microsoft® Windows® XP


#### Before You Begin


If you are considering reinstalling the Windows XP operating system to correct a problem with a newly installed driver, first try using Windows XP Device Driver Rollback. If Device Driver Rollback does not resolve the problem, then use System Restore to return your operating system to the operating state it was in before you installed the new device driver.

 **NOTICE:** Before performing the installation, back up all data files on your primary hard drive. For conventional hard drive configurations, the primary hard drive is the first drive detected by the computer.

To reinstall Windows XP, you need the following items:

- Dell™ *Operating System* CD
- Dell *Drivers and Utilities* CD

 **NOTE:** The *Drivers and Utilities* CD contains drivers that were installed during assembly of the computer. Use the *Drivers and Utilities* CD or go to the Dell support site to load any required drivers.

 **NOTE:** The *Operating System* and *Drivers and Utilities* CDs are optional and may not ship with all computers.

### Reinstalling Windows XP

➔ **NOTICE:** You must use Windows XP Service Pack 1 or later when you reinstall Windows XP.

To reinstall Windows XP, perform all the steps in the following sections in the order in which they are listed.

The reinstallation process can take 1 to 2 hours to complete. After you reinstall the operating system, you must also reinstall the device drivers, virus protection program, and other software.

➔ **NOTICE:** The *Operating System* CD provides options for reinstalling Windows XP. The options can overwrite files and possibly affect programs installed on your hard drive. Therefore, do not reinstall Windows XP unless a Dell technical support representative instructs you to do so.

➔ **NOTICE:** To prevent conflicts with Windows XP, disable any virus protection software installed on your computer before you reinstall Windows XP. See the documentation that came with the software for instructions.

### Booting From the Operating System CD

- 1 Save and close any open files and exit any open programs.
- 2 Insert the *Operating System* CD. Click **Exit** if **Install Windows XP** message appears.
- 3 Restart the computer.
- 4 Press <F12> immediately after the DELL™ logo appears.

If the operating system logo appears, wait until you see the Windows desktop, and then shut down the computer and try again.


- 5 Press the arrow keys to select **CD-ROM**, and press <Enter>.
- 6 When the **Press any key to boot from CD** message appears, press any key.

### Windows XP Setup


- 1 When the **Windows XP Setup** screen appears, press <Enter> to select **To set up Windows now**.
- 2 Read the information on the **Microsoft Windows Licensing Agreement** screen, and press <F8> to accept the license agreement.
- 3 If your computer already has Windows XP installed and you want to recover your current Windows XP data, type **r** to select the repair option, and remove the CD.
- 4 If you want to install a new copy of Windows XP, press <Esc> to select that option.
- 5 Press <Enter> to select the highlighted partition (recommended), and follow the instructions on the screen.

The **Windows XP Setup** screen appears, and the operating system begins to copy files and install the devices. The computer automatically restarts multiple times.

✍ **NOTE:** The time required to complete the setup depends on the size of the hard drive and the speed of your computer.

-  **NOTICE:** Do not press any key when the following message appears: Press any key to boot from the CD.
- 6 When the **Regional and Language Options** screen appears, select the settings for your location and click **Next**.
  - 7 Enter your name and organization (optional) in the **Personalize Your Software** screen, and click **Next**.
  - 8 At the **Computer Name and Administrator Password** window, enter a name for your computer (or accept the one provided) and a password, and click **Next**.
  - 9 If the **Modem Dialing Information** screen appears, enter the requested information and click **Next**.
  - 10 Enter the date, time, and time zone in the **Date and Time Settings** window, and click **Next**.
  - 11 If the **Networking Settings** screen appears, click **Typical** and click **Next**.
  - 12 If you are reinstalling Windows XP Professional and you are prompted to provide further information regarding your network configuration, enter your selections. If you are unsure of your settings, accept the default selections.


Windows XP installs the operating system components and configures the computer. The computer automatically restarts.

-  **NOTICE:** Do not press any key when the following message appears: Press any key to boot from the CD.
- 13 When the **Welcome to Microsoft** screen appears, click **Next**.
  - 14 When the **How will this computer connect to the Internet?** message appears, click **Skip**.
  - 15 When the **Ready to register with Microsoft?** screen appears, select **No, not at this time** and click **Next**.
  - 16 When the **Who will use this computer?** screen appears, you can enter up to five users.
  - 17 Click **Next**.
  - 18 Click **Finish** to complete the setup, and remove the CD.
  - 19 Reinstall the appropriate drivers with the *Drivers and Utilities* CD.
  - 20 Reinstall your virus protection software.
  - 21 Reinstall your programs.

 **NOTE:** To reinstall and activate your Microsoft Office or Microsoft Works Suite programs, you need the Product Key number located on the back of the Microsoft Office or Microsoft Works Suite CD sleeve.

## Using the Drivers and Utilities CD

To use the *Drivers and Utilities* CD (also known as the ResourceCD) while you are running the Windows operating system:

 **NOTE:** To access device drivers and user documentation, you must use the *Drivers and Utilities* CD while you are running Windows.

- 1 Turn on the computer and allow it to boot to the Windows desktop.
- 2 Insert the *Drivers and Utilities* CD into the CD drive.

If you are using the *Drivers and Utilities* CD for the first time on this computer, the **ResourceCD Installation** window opens to inform you that the *Drivers and Utilities* CD is about to begin installation.

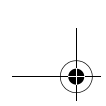
- 3 Click **OK** to continue.  
To complete the installation, respond to the prompts offered by the installation program.
- 4 Click **Next** at the **Welcome Dell System Owner** screen.
- 5 Select the appropriate **System Model**, **Operating System**, **Device Type**, and **Topic**.

### Drivers for Your Computer

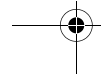
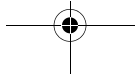
To display a list of device drivers for your computer:

- 1 Click **My Drivers** in the **Topic** drop-down menu.  
The *Drivers and Utilities* CD scans your computer's hardware and operating system, and then a list of device drivers for your system configuration is displayed on the screen.
- 2 Click the appropriate driver and follow the instructions to download the driver to your computer.

To view all available drivers for your computer, click **Drivers** from the **Topic** drop-down menu.



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